

## **EXECUTIVE SUMMARY**

## Executive Summary

### **The Steering Committee *Proposed WRIA 8 Chinook Salmon Conservation Plan***

#### ***Why is there a plan and what is it?***

The Lake Washington/Cedar/Sammamish Watershed (WRIA 8<sup>1</sup>), located in western Washington, is home to three populations of Chinook salmon: Cedar River, North Lake Washington, and Issaquah. Each year Chinook salmon spawn and rear in the WRIA 8 rivers and streams, and use the lakes, rivers, estuary, and nearshore to rear and migrate to the ocean. Development in the watershed for human use has dramatically altered habitat that salmon need to survive. Chinook salmon (known more commonly as king salmon) are in trouble; they are far less abundant now than they were even in recent decades, and all three populations are at high risk of extinction. In 1999, the federal government listed Puget Sound Chinook salmon and bull trout as threatened under the Endangered Species Act (ESA).

Salmon have historically been, and continue to represent, a vital part of the culture and economy of this watershed. The health of salmon populations is an indicator of overall watershed health. Condition of fish habitat is linked to the quality of the environment and the benefits human inhabitants reap from it. Concerned about the need to protect and restore habitat for Chinook salmon for future generations, 27 local governments in WRIA 8, including King and Snohomish counties, Seattle, and 24 other cities in those counties, signed an inter-local agreement in 2001 to jointly fund the development of a conservation plan to protect and restore salmon habitat.

The WRIA 8 Steering Committee developed this Plan through a multiple stakeholder planning process. The Steering Committee is composed of city and county elected leaders, concerned citizens, scientists, and representatives from business and community groups, water and sewer districts, and state and federal agencies. The Steering Committee *Proposed WRIA 8 Chinook Salmon Conservation Plan* is the result of these collaborative efforts. It is a science-based plan that contains recommendations for prioritized actions to restore and protect salmon habitat, and a collaborative approach for implementing these actions over the next ten years.

The decline of Chinook and other salmon has generally been attributed to four factors: habitat, hydropower, harvest, and hatcheries. This Plan focuses on conservation of Chinook salmon *habitat* because local governments have responsibility for the habitat-based aspects of Chinook survival. Local governments and other WRIA 8 partners can make the most impact on habitat where salmon spawn and rear, particularly through implementation of land use and stormwater management policies and programs, local protection and restoration projects, and public involvement opportunities. The state and the tribes, who are the legal co-managers of the fishery resource, are responsible for addressing harvest and hatchery management in WRIA 8. Puget Sound Shared Strategy will integrate harvest and hatchery recommendations with habitat recommendations.

As noted above, bull trout have also been listed as threatened in WRIA 8 under the ESA. Bull trout use some of the lower watershed for migration, overwintering, and foraging. Although much less is known about bull trout's habitat needs, it is hypothesized that

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<sup>1</sup> The watershed is also referred to as Water Resource Inventory Area (WRIA) 8.

proposed improvements to Chinook habitat (especially in the Lake Washington, Ship Canal, and Puget Sound Nearshore subareas) will also benefit bull trout. The bull trout in the Upper Cedar River watershed, i.e., in Chester Morse Lake, are included in the City of Seattle's Habitat Conservation Plan.

### ***Next steps to finalize the Plan***

The Steering Committee has provided significant guidance in the Plan's development and sought input from the public before finalizing the Plan. A public review process was held from November 12<sup>th</sup> through December 17<sup>th</sup>, 2004. The public provided comments at four open houses and submitted 57 comment letters and emails. This feedback was considered by the Steering Committee and the plan was revised.

Through this proposed Plan, the Steering Committee recommends local jurisdictions and other WRIA 8 partners make commitments to implement actions and monitoring over the 10-year plan horizon. However, the proposed Plan does not commit jurisdictions or other partners to fund or implement the recommendations. Before commitments can be made, this Plan needs approval of the WRIA 8 Forum, composed of local elected leaders representing the 27 jurisdictions that have funded the planning effort, and review and ratification by local jurisdictions.

The proposed Plan is now being submitted to the Forum for their review and approval. The Forum has 90 days to approve or remand the Plan, and recommend how ratification by local jurisdictions should occur. Upon ratification, the Forum will submit the final Plan to the Puget Sound Shared Strategy to become part of the regional recovery plan for Chinook throughout Puget Sound (technically referred to as the Puget Sound Chinook Evolutionarily Significant Unit - ESU).

### **The Lake Washington/Cedar/Sammamish Watershed**

The Lake Washington/Cedar/Sammamish Watershed covers 692 square miles and contains two major river systems (Cedar and Sammamish), three large lakes (Washington, Sammamish, and Union), and numerous creeks including Issaquah and Bear creeks. The basin drains into Puget Sound through the Ship Canal and Hiram Chittenden (Ballard) Locks. The WRIA includes the marine nearshore and a number of smaller creeks that drain directly to Puget Sound between West Point in the City of Seattle northward to Elliott Point in the City of Mukilteo. WRIA 8 is located predominantly in western King County, but about 15 percent extends northward into Snohomish County. Over 53 percent of the marine shoreline is located within Snohomish County (see Figure 1, a map of the watershed).

Prior to the 1850s, the aquatic areas in WRIA 8 were a network of lakes, streams, sloughs, marshes, islands, beaver ponds, and estuaries. The watershed consisted of forested land through which meandered rivers and creeks. However, later in the 1800s, major alterations began with heavy logging of old growth forests, which degraded forest cover, hydrology, and instream habitat. At the turn of the 20<sup>th</sup> century, Seattle built the Landsburg Diversion Dam and tapped the Cedar River as its main source of water. Between 1910 and 1920, the Ship Canal and Ballard Locks were built, which created a new connection between Lake Washington and Puget Sound. The connection changed the outlet of Lake Washington from the Black River at the south end of the lake, to the Ship Canal at the west end. This caused Lake Washington's water surface elevation to drop about 10 feet, which in turn also dropped the level of Lake Sammamish and dried up much of the wetlands along the Sammamish River. About the same time, the Cedar River was channelized and re-routed to flow into

Lake Washington. In addition, the Sammamish River was straightened and its banks were hardened. Thus, salmon were faced with a highly altered migration route to reach their natal habitat, as well as an abrupt, artificial estuary to pass through as they moved in and out of the WRIA 8 system.

Agriculture, and later, urban and suburban development during the 20<sup>th</sup> century have further altered the watershed's land cover and hydrology. Loss of forest cover and increased impervious areas, increased water withdrawals to serve urban and agricultural areas, and flood control activities (such as channelizing and confining rivers and streams) have all had significant impacts on local instream habitats and the landscape processes that create and maintain these habitats. Salmon have also been affected by development along lake shorelines and the introduction of non-native fish and plants.

WRIA 8 is the most densely populated watershed in Washington. Approximately 55 percent of the land area in the WRIA lies inside the Urban Growth Area. The population in 2002 was approximately 1.3 million people; the projected population for 2022 is 1.6 million.

## **Scientific Foundation for the Plan**

### ***WRIA 8 Chinook populations***

The Plan is built around the need to support recovery of three Chinook populations in the watershed: the Cedar River population, the North Lake Washington population, and the Issaquah population (see discussion below under *Uncertainties*). The Cedar River population spawns in the Cedar River's mainstem and to a lesser extent in its tributaries. When juveniles leave the river in the spring, they rear and migrate in shallow habitats along Lake Washington's shorelines, particularly in the south end. The North Lake Washington population spawns in the tributaries to northern Lake Washington and the Sammamish River, including Bear, Little Bear, North, and Kelsey creeks. Issaquah Chinook spawn in tributaries to Lake Sammamish, including the Issaquah Creek system and Lewis and Laughing Jacobs Creek. Propagation of this population occurs through both natural spawning – in the wild – and artificial spawning in the Issaquah Hatchery. Salmon from all three populations migrate in and out of the watershed through the lakes, Ship Canal, and Locks; juveniles rear in the marine nearshore areas of Puget Sound before heading to the ocean. WRIA 8 Chinook populations are unique from other populations in the Puget Sound ESU as they are the only ones that use a lake for rearing and migrating.

### ***Current habitat conditions and limiting factors***

Development in WRIA 8 for human uses has dramatically altered aquatic habitat conditions and the processes that form and maintain them. The factors that limit salmon habitat are similar for the lakes, rivers, and creeks in the watershed, although the magnitude of impact varies by type of water body and specific watershed area. It is important to understand that the limiting factors interact with one another to worsen the habitat problems seen in the aquatic systems. The factors that limit habitat include:

- Altered hydrology (e.g., low base flows, higher peak flows following storms, and increased 'flashiness', which means more frequent and rapid responses when it rains)
- Loss of floodplain connectivity (e.g., reduced access to side-channels or off-channel areas due to bank armoring and development close to shorelines)
- Lack of riparian vegetation (e.g., from clearing and development)
- Disrupted sediment processes (e.g., too much fine sediment deposited in urban streams, or sources of spawning gravel disconnected from the river channel)

- Loss of channel and shoreline complexity (e.g., lack of woody debris and pools)
- Barriers to fish passage (e.g., from road crossings, weirs, and dams)
- Degraded water and sediment quality (e.g., pollutants and high temperatures)

***What the science says***

The WRIA 8 Technical Committee is an inter-jurisdictional, multi-stakeholder committee of science professionals who developed the science foundation for the Plan. The Technical Committee used three analytical tools to create the conservation strategy for Chinook habitat protection and restoration. Those tools were a Viable Salmonid Population (VSP) framework based on NOAA Fisheries guidance, a Watershed Evaluation, and an Ecosystem Diagnosis and Treatment (EDT) habitat model adapted to WRIA 8. NOAA Fisheries is applying the VSP concepts to salmon recovery efforts throughout the West Coast; the Watershed Evaluation was developed by the Technical Committee for application in WRIA 8. The EDT river habitat model has been used by the state and other entities around Washington, and it was customized by the Technical Committee to include the lakes, Ship Canal, and Locks.

The conservation strategy provides the framework for development of Plan actions and is founded on basic ecosystem objectives, including:

- Protect and restore habitat Chinook salmon use during all of the life stages that are spent in the WRIA 8 watershed, from egg to fry to smolt to adult
- Protect and restore the natural processes that create this habitat, such as natural flow regimes and movement of sediments and spawning gravels
- Maintain a well-dispersed network of high-quality habitat to serve as centers for the population
- Provide safe connections between those habitat centers to allow for future expansion.

The VSP assessment of the relative risk to the long-term viability of WRIA 8 Chinook salmon determined that all three Chinook salmon populations are at extremely high risk of extinction. Consequently, habitat actions, in coordination with actions by harvest and hatchery managers, are needed to address all three populations. The Technical Committee has hypothesized that the Cedar population is at the highest relative risk (because of steeply declining abundance trends), followed by the North Lake Washington population, then Issaquah. Therefore, the conservation strategy recommends that actions focus on areas used by the Cedar Chinook population as first priority, followed by the North Lake Washington population, and then Issaquah. This strategy could change pending results of the genetics study (described in the *Uncertainties* section below).

The Watershed Evaluation divided areas used by each of the three populations into *tiers*, based on relative watershed conditions and Chinook abundance and use. In general, Tier 1 subareas have the relatively highest quality habitat and highest fish abundance and/or use, while Tier 3 subareas have the relatively most degraded habitat and infrequent Chinook use. Actions in Tier 1 subareas generally are higher priority than Tier 2, but Tier 2 actions are needed in many subareas to expand the Chinook populations spatially over the long term to reduce the risk posed by having key life stages such as spawning and rearing occur in only one stream or stream segment. In addition, actions are needed at the landscape scale to protect and restore watershed processes that create and maintain Chinook habitat for all life stages. Therefore, it is essential that land use and public outreach actions are implemented in all three tiers. In general, actions recommended for the Tier 1 subareas should protect and restore remaining high quality habitat and related processes, Tier 2 actions should

focus on protecting remaining habitat as well as restoring habitat to Tier 1 conditions, and Tier 3 actions should focus on maintaining and restoring water quality and natural hydrologic processes (stormwater and instream flows).

The EDT modeling phase of the technical work resulted in restoration and protection priorities at both the landscape scale and reach scale. The conservation strategy identified objectives for actions in each of the Chinook population and migratory areas; these are summarized in Table 1 in the section on *Actions* below.

### ***Working with and resolving uncertainties***

This Plan reflects the most up-to-date scientific information available regarding the current health of Chinook populations and their habitat in WRIA 8 and management actions that are advisable and necessary to improve their health. However, there remain several areas of scientific uncertainty that influence choices about which actions offer the most benefit toward reaching the Plan's goals and objectives. Some of these uncertainties will be addressed through research, and the research results will be incorporated into the Plan through adaptive management. These uncertainties include, but are not limited to the following:

- While the WRIA 8 Plan is based on three Chinook populations, the NOAA Fisheries Puget Sound Technical Recovery Team (PSTRT) identifies two: the Cedar River Chinook and Sammamish River Chinook (which includes North Lake Washington and Issaquah sub-populations). The WRIA 8 Technical Committee decided to take a precautionary approach and plan for three populations. A genetics study of WRIA 8 populations, under way at this time, will help address some of the questions surrounding current genetic differences that exist among Chinook stocks in WRIA 8.
- Uncertainties about salmon-habitat relationships and interactions among habitat, hatchery, and harvest management decisions (including the relative contribution of hatchery strays on spawning grounds and their impact) have not been fully explored.
- The Steering Committee mission and goals require that the Plan set a combination of biological goals and habitat performance goals that focus on the habitat processes, functions and structures that support the biological goals. The PSTRT and the co-managers have identified biological goals (referred to as 'planning ranges and targets') for most Chinook populations in the Puget Sound ESU.
  - Immediately prior to the publication of this Plan in February 2005, the Washington Department of Fish and Wildlife (WDFW) provided recovery planning targets for WRIA 8. These numbers were generated by WDFW using the WRIA 8 Technical Committee EDT habitat model assuming "properly functioning conditions" for habitat in rivers and streams and template (presumed historic) habitat conditions in the lakes, Ship Canal, Locks, and estuary.
  - The Technical Committee will continue to evaluate potential performance measures, including the planning targets identified by WDFW, as part of the evaluation of conservation actions during 2005.
- It has not been determined which actions provide the most habitat benefits per dollar spent, and how far suites of actions will get us toward Chinook recovery. The treatment phase, the "T" of the EDT model, to be completed during 2005, will provide additional analysis and direction. Risk of not taking specific actions has not been determined.
- Effects of global warming have not yet been analyzed for the watershed. Puget Sound Shared Strategy is providing analysis of global warming effects on salmon.

## Summary of Major Recommendations

### ***Adaptive management approach and implementation timeline***

Plan implementation will be guided by the basic principles of adaptive management, which encourage taking advantage of opportunities to assess progress and learning from actions taken in order to make better decisions in the future. Given the complexity of salmon recovery in WRIA 8, adaptive management can help stakeholders spend limited resources in a more cost-effective way. This approach calls for setting quantitative and qualitative goals for what WRIA 8 partners hope to achieve through the Plan and monitoring to measure success towards achieving those goals. It also calls for establishing a collaborative process to secure resources to carry out actions over the Plan horizon. The Steering Committee made specific recommendations about organizational structure, monitoring, and funding to implement the Plan adaptively, as summarized below.

The Steering Committee recommends an initial ten-year horizon for Plan implementation. While setting this timeframe recognizes that stakeholders can more easily commit to taking actions in the near term, it also acknowledges that salmon response to habitat improvements – and detecting that response – will require a very long time. The Plan calls for an annual report to keep stakeholders and the public informed on progress of implementation, along with an assessment every three to five years to determine action effectiveness and implications for Plan priorities.

### ***Organizational structure***

The Steering Committee recommends that the Plan be implemented collaboratively, to continue the collaboration that has characterized current planning efforts in WRIA 8. Coordinated efforts should include tracking actions, technically assessing action effectiveness, communicating progress, and securing funding.

The Steering Committee's proposed organizational structure features:

- An Oversight Body to provide direction to ongoing Plan implementation activities and guide work of committees and shared staff. This body would consist of representatives of Plan implementers and funders, including government agencies, citizens, and non-governmental organizations; it would meet at least quarterly.
- A Summit Advisory Body that would meet less frequently and would serve as a forum where information about Plan progress could be widely shared. This body would advise the Oversight Body on Plan priorities, resource allocation, and major Plan improvements.
- Three working committees, made up of members from WRIA jurisdictions and stakeholder organizations and consisting of a Technical Committee, an Action Committee, and a Public Outreach Committee.

The Steering Committee recommends retaining a few shared staff to help keep jurisdictions engaged in action implementation, support ongoing technical work to evaluate actions, secure funding, staff WRIA committees, and to support collaborative implementation needs generally. One of the proposed positions would be a high-profile Executive Director to lead and facilitate efforts among WRIA partners, work with the Oversight and Summit Advisory Bodies, secure external resources through lobbying, and network with the broader recovery effort.

***Actions to protect and restore habitat***

The actions recommended in this Plan are intended to prevent further decline of Chinook habitat and restore habitat that is now degraded. Actions were developed for all areas where the three Chinook populations spawn and rear, and for the migratory and rearing corridors Chinook use to travel to and from the ocean (Lake Washington, Lake Sammamish, Sammamish River, Lake Union, Ship Canal, Locks, and Puget Sound Nearshore).

The habitat actions were developed through a collaborative bottoms-up process that involved extensive participation of local stakeholders, jurisdiction staff, environmental and business representatives, project experts, and the WRIA 8 Technical Committee. The actions were developed with guidance from the Steering Committee mission and goals, the conservation strategy, the Near-Term Action Agenda, and other existing habitat efforts such as the Cedar River Legacy and Bear Creek and Issaquah Waterways programs. Table 1 summarizes the actions, organized by objectives outlined in the conservation strategy and focused on specific scientific outcomes.

Actions for the Plan were developed in three broad categories:

- *Land use, planning, and infrastructure*: actions that address habitat-forming processes at a landscape scale, and focus on accommodating future growth while minimizing impacts to salmon habitat. Included are incentive programs, regulations, best management practices, low impact development recommendations, enforcement actions, and policies
- *Site-specific habitat protection and restoration projects*: actions that protect or restore a specific area or parcel through acquisition or easements, and restoration projects such as levee setbacks, revegetation, addition of large woody debris, and removal of barriers to fish passage
- *Public outreach and education*: actions that support the land use and site-specific actions or educate and encourage behavior that benefits habitat health, such as through workshops for shoreline landowners, a regional marketing campaign, and promotion of stewardship by businesses and community groups.

Site specific projects in the Plan are identified and prioritized for all Tier 1 and 2 subareas. Land use and public outreach actions are provided for all tiers, including Tier 3. Actions are presented in two forms: “comprehensive lists” of 1,200 actions that can be used by implementers at any time to identify and carry out actions, and a much shorter “start-list” of 170 priority actions on which regional funding and analysis (e.g., the treatment phase of EDT) will focus during the first ten years of Plan implementation. These lists will evolve through the adaptive management process based on monitoring results and new science.



**Table 1: Objectives and Focus of Actions Based on Conservation Strategy**

<b><i>Cedar River</i></b>	<b><i>North Lake Washington</i></b>	<b><i>Issaquah</i></b>	<b><i>Migratory/Rearing</i></b>
<p><b>Objectives of actions for Tier 1 and 2 subareas:</b></p> <ul style="list-style-type: none"> <li>• Protect/restore habitat to increase numbers of Chinook salmon</li> <li>• Improve habitat to support juvenile rearing</li> <li>• Increase numbers of fish and life histories in Tier 2 subareas</li> </ul> <p><b>Objectives of actions for Tier 3 subareas:</b></p> <ul style="list-style-type: none"> <li>• Maintain and restore water quality and natural hydrologic processes (stormwater and instream flows)</li> </ul>	<p><b>Objectives of actions for Tier 1 and 2 Subareas:</b></p> <ul style="list-style-type: none"> <li>• Protect/restore habitat to increase numbers of Chinook salmon in Bear and Cottage Lake creeks</li> <li>• Expand distribution of Chinook into Tier 2 subareas to reduce risk of relying on Bear Creek</li> </ul> <p><b>Objectives of actions for Tier 3 subareas:</b></p> <ul style="list-style-type: none"> <li>• Maintain and restore water quality and natural hydrologic processes (stormwater and instream flows)</li> </ul>	<p><b>Objectives of actions for Tier 1 subareas:</b></p> <ul style="list-style-type: none"> <li>• Protect existing habitat and ecosystem processes</li> <li>• Reduce risks of hatchery strays to other populations</li> </ul> <p>(Note: All Chinook streams in Issaquah are designated as Tier 1)</p>	<p><b>Objectives of actions:</b></p> <ul style="list-style-type: none"> <li>• Reduce predation on juvenile migrants in lakes by increasing rearing and refuge opportunities</li> <li>• Protect and restore natural estuary and nearshore processes</li> </ul>
<p><b>Focus of actions:</b></p> <ul style="list-style-type: none"> <li>• Protect water quality</li> <li>• Protect/restore instream flows</li> <li>• Protect/restore riparian habitat</li> <li>• Remove/set back levees to restore connections with off-channel habitat</li> <li>• Restore sources of large woody debris (LWD) and add new LWD to restore pool habitat</li> </ul>	<p><b>Focus of actions:</b></p> <ul style="list-style-type: none"> <li>• Protect/restore water quality (reduce sediments and high water temperature)</li> <li>• Protect natural hydrological processes</li> <li>• Protect/restore riparian habitats</li> <li>• Reduce bed scour from high stormwater runoff flows</li> <li>• Reduce confinement of the channel</li> <li>• Restore sources of LWD and install new LWD to provide juveniles refuge from predators</li> </ul>	<p><b>Focus of actions:</b></p> <ul style="list-style-type: none"> <li>• Protect existing habitat and processes, such as water quality, forest cover, riparian cover, LWD, and channel connectivity</li> <li>• Hold on restoration actions until additional guidance comes from NOAA Fisheries and others as to how such actions would affect other populations due to hatchery strays</li> </ul>	<p><b>Focus of actions:</b></p> <p><i>Lakes Washington &amp; Sammamish</i></p> <ul style="list-style-type: none"> <li>• Restore shallow water habitats and creek mouths for juvenile rearing and migration</li> </ul> <p><i>Sammamish River</i></p> <ul style="list-style-type: none"> <li>• Restore floodplain connections and channel meanders</li> <li>• Restore backwater pools, LWD, riparian vegetation</li> </ul> <p><i>Ship Canal/Locks</i></p> <ul style="list-style-type: none"> <li>• Reduce high temperatures and restore shallow water habitats</li> <li>• Continue to improve fish passage through Locks and Ship Canal</li> </ul> <p><i>Nearshore/Estuary</i></p> <ul style="list-style-type: none"> <li>• Restore feeder bluffs, “pocket” estuaries, marine riparian vegetation</li> <li>• Restore riparian vegetation and freshwater mixing zone downstream of Locks</li> <li>• Remove armoring along shoreline</li> </ul>

### ***Measures and monitoring***

The Steering Committee has recommended a strong monitoring program, recognizing that effective monitoring can help provide certainty that funding is targeted to the most critical actions and determine whether actions are achieving objectives. Three types of monitoring are particularly recommended: implementation, direct effectiveness, and cumulative effectiveness:

- Implementation monitoring asks how many and where actions are being implemented, as well as their intended objectives.
- Direct effectiveness monitoring asks if specific actions (e.g., the addition of large woody debris) have met their specific objectives (e.g., creating pools).
- Cumulative effectiveness monitoring asks whether and how multiple actions across a basin are improving habitat and if salmon survival is improving because of those habitat changes. Cumulative effectiveness is measured through such tools as aerial imagery to evaluate habitat changes, and juvenile outmigrant (i.e., smolt) traps and spawner surveys to evaluate changes in Chinook survival.

The Steering Committee has identified cumulative effectiveness as the highest priority for collaborative monitoring, and recommends that it encompass programmatic actions (i.e., land use and public outreach) and actions that reduce predation as well as site-specific projects. Several elements are crucial to the success of the monitoring program. These include: securing stable, consistent funding for monitoring; avoiding duplication of efforts and creating partnerships with other entities involved in monitoring; focusing monitoring on areas of greatest uncertainty; communicating monitoring results to decision-makers and the public; and identifying endpoints to show when goals have been achieved. The Oversight Body and Technical Committee will need to work closely with other entities in the very near term to develop a comprehensive monitoring and data management program, and to find funding for and implement the range of monitoring tasks.

### ***Funding Plan implementation***

The Steering Committee recommends a high level of effort to implement the Plan in order to successfully protect and restore salmon habitat. Current funding, which includes contributions from local, state, and federal agencies for projects that are focused on and have direct benefits to salmon, is roughly estimated at \$11 million per year. The Steering Committee recommends funding for future Plan implementation in three areas: continued regional collaboration (i.e., the shared staff and committee support described earlier), implementation of site-specific and programmatic actions, and monitoring. In order to meet this level of effort, the Steering Committee is proposing a funding strategy at a level that exceeds current funding by 50 percent. A 50 percent increase would mean an annual budget for the WRIA 8 Plan implementation of about \$17.3 million. The adequacy of this funding level reflects an assumption by the Steering Committee that the current level of in-kind contributions of staff time from participating entities will continue during Plan implementation.

The Steering Committee recognizes that in order to go beyond current funding levels, a number of important steps are necessary, including the following:

- Support continuation of local and regional sources (e.g., King Conservation District and King County Conservation Futures Tax)
- Develop local grant-writing and lobbying capacity
- Collaborate to secure new state and/or regional funding sources

- Encourage increased funding from federal sources, e.g., U.S. Army Corps of Engineers.

It should be noted that the proposed level of effort and funding is not based on the number and type of actions that would need to be implemented annually to achieve a specific level of salmon response. Additional information about what is necessary to achieve a specific level of salmon response may become available through the adaptive management process and the treatment phase of the EDT model.

### **Commitments**

Implementation of the Plan is expected to offer many benefits to fish and humans, including healthy salmon populations; improvement in overall ecosystem health (e.g., water quality); a legacy for future generations of salmon swimming through WRIA 8 streams and lakes; and assurances from federal and state governments to local governments in exchange for commitments to fund and implement the ongoing collaborative effort, proposed actions, and monitoring. The Steering Committee recommends as a minimum commitment that jurisdictions pass resolutions to formally consider the Plan as guidance, and possibly further, that jurisdictions commit to implementing particular actions or adopting the entire Plan. The Steering Committee supports various means to engage federal and state agencies, developers, landowners, citizens, and other non-local government entities in actions that they could implement.

In exchange for making commitments to take action, the Steering Committee recommends that jurisdictions work with the federal and state governments to negotiate potential benefits and assurances. These could include funding, expedited permitting, de-listing criteria, and standing of the federal government with the local jurisdictions should there be legal challenges to the sufficiency of the Plan. The more assurances desired from the federal government, the stronger the commitments will need to be. The Steering Committee recognizes that this aspect of the proposed Plan is in its initial stages and is part of an iterative discussion involving federal agencies and other entities participating in salmon recovery. There will need to be a dialog among appropriate parties (such as the Forum, Puget Sound Shared Strategy, federal, state, and local governments, and the co-managers) to define and refine the final commitments, assurances, and expectations that will benefit salmon recovery.

### **Future of WRIA 8 Salmon**

With this Plan, the WRIA 8 Steering Committee – with the help of governments, businesses, developers, shoreline landowners, community groups, gardeners, and citizens – hopes to lead the region towards a legacy of healthy, harvestable salmon and improved water quality for future generations. In the next 12 months, many decisions about the recommendations in this Plan need to be made. What will be implemented, by whom, and with what funding?

How we build our communities, the land and resources we choose to protect, and the shoreline we select to restore all influence salmon habitat. The choice is up to the residents, businesses, and governments in WRIA 8. Will we lose Chinook salmon forever or alter our habits and learn to better co-exist with them? Will we leave only a legend of the king salmon that once swam in our waters, or will we ensure the legacy of thriving Chinook that migrate every year through our shared watershed? Decisions on whether and how to implement this Plan will help determine the answer.